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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _17 May 2010_.
2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-26_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-26_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

## DETAILED ACTION

### *Response to Amendment*

1.    The applicant has amended the following:

Claims: 15-20 has been amended.

Claims: 1-14 and 21-26 has not been amended.

With regards to the 112 and 101 rejections given on claims 15-20 on the previous office action, the applicant's amendments to claims 15-20 has overcome the 112 and 101 rejections.  Therefore the examiner withdraws the 112 and 101 rejections from the previous office action.

### *Response to Arguments*

2.    Applicant's arguments filed 05/17/10 have been fully considered but they are not persuasive.

The applicant argues features wherein a monitor apparatus of a wireless network comprising a means connected to an access point of the wireless network is configured to receive packet transfer information retained in said access point and extract an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information and an estimating means to estimate that a terminal having said extracted address exists as a subordinate of the access point retaining said packet

transfer information and has a connection with the access point retaining said packet

transfer information.

3.      Before addressing the applicant's arguments, the examiner would like to clarify

the position taken with respect to the applied art:

Siddiqi discloses a wireless authoritative access point (AAP) having subordinate

access points, wherein the AAP receives a subnet mapping table (packet transfer

information) from a second AAP and storing the subnet mapping table in the AAP,

therefore means connected to an access point configured to receive packet transfer

information retained in said access point.  Siddiqi continues to disclose the AAP

comparing the received mapping table with the stored mapping table to determine if

there are additional items in the received subnet mapping table that are not in the stored

subnet mapping table.  The AAP will add that access point (AP) entry to its table after

confirming that the AP identified in that entry is still alive by sending an ALIVE packet

and not adding the entry if the AAP determines that the AP identified is not reachable,

therefore extracting the address of the AP (wireless interface, terminal) from the

received subnet mapping table and determining and estimating if the AP (wireless

interface, terminal) is a subordinate or has a connection with the access point retaining

said packet transfer information.

Fukutomi discloses an edge router having multiple subordinate routers wherein

the edge router has a mapping table that stores the IP addresses and list information on

the numbers of the receiver ports of the LAN interface of the edge router to which

subordinate routers reaching receiver hosts are connected.

With regards to the applicant's arguments that Siddiqi in view of Fukutomi fails to

disclose "extracting an address of which a transfer destination is a port bound to a

wireless interface" because Fukutomi discloses a table that includes the destination IP

addresses and the output port of the LAN interface while in stark contrast to the

teachings of Fukutomi, the independent claims recite extracting "an address of which a

transfer destination is a port bound to a wireless interface"; that is that the claims are

not directed to a corresponding LAN interface and the destination (as disclosed by

Fukutomi), but rather to corresponding a wireless interface and the transfer destination,

thereby making it possible to execute communication without employing information

peculiar to the vendor since the address of which the transfer destination is the wireless

interface is employed. The examiner respectfully disagrees. The applicant's argued

limitations is very broad and could be interpreted a number of ways. The claim

limitation of "a port bound to a wireless interface" can be interpreted as "a port tied to or

connected to a wireless interface" meaning that a wireless access point has a wireless

interface connected to a port to communicate signals wirelessly or it can be interpreted

as "a port going to or a port whose destination is a wireless interface" meaning that the

port of the access point is going to a wireless interface that is not part of the access

point. Both interpretations are disclosed by the combination of Siddiqi in view of

Fukutomi. Siddiqi discloses a wireless authoritative access point (AAP) sending and

receiving signals to its subordinate access points and Fukutomi discloses that the

teaching of having specific ports in the router/access points going to specific

destinations. In the first interpretation, the wireless AAP when sending signals to its

subordinate AP will extract the address of the subordinate AP and send the signals to

the port bound (connected or tied to) to the wireless interface of the wireless AAP in

order to communicate signals to the subordinate AP, therefore the wireless AAP having

its own wireless interface connected to a port will send the signals to the transfer

destination which is the port connected to and tied to within the wireless AAP. In the

second interpretation, the wireless AAP wishing to send signals to its subordinate AP

will extract the address and determine the port of the wireless AAP whose destination is

going to its subordinate wireless AP (wireless interface) and will send the signals to the

specific port of the specific subordinate AP, therefore the transfer destination is a port

bound (going to) a wireless interface (wireless interface of subordinate AP). Both

interpretations are disclosed by the combination of Siddiqi in view of Fukutomi, since a

wireless AAP will have its own wireless interface connected to a port within the wireless

AAP and the subordinate AP will have their own wireless interface connected to a port

within the subordinate AP.

4.      Therefore, the argued limitations read upon the cited references or are written

broad such that they read upon the cited references, as follows:

## *Claim Objections*

5.      Claims 15-20 are objected to because of the following informalities:


        Claims 15-20 claims "a control program embodied on a non-transitory memory

that, in response to being by a processor, causes a device to perform operations".

However, claims 15-20 as currently claimed and worded is confusing.  For the purpose

of the examination and rejection provided below, the examiner will interpret the claims

to read as "a control program embodied on a non-transitory memory that causes a

device to perform operations."

        Appropriate correction is required.


## *Claim Rejections - 35 USC § 103*

6.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.


7.      Claims 1-5, 7-11, 13-19 and 21-25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Siddiqi et al. (US Patent 7362742 herein after referenced as Siddiqi)

in view of Fukutomi (US Patent Publication 2003/0012202 herein after referenced as

Fukutomi).

Regarding claim 1, Siddiqi discloses:

The applicant claims "A monitor apparatus of a wireless network, comprising: a

means connected to an access point of the wireless network via a network, said means

configured to receive packet transfer information retained in said access point and

extract an address of which a transfer destination is a wireless interface from said

packet transfer information" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 &

Column 6, Lines 20-25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-

45 of Siddiqi, wherein Siddiqi discloses a second AAP (authoritative access point)

sending AP (access point) information such as a subnet mapping table to a first AAP

and wherein the first AAP attempts to add entries from the received subnet mapping

table ("packet transfer information") to its own subnet mapping table by first comparing

and determining if there are additional items in the received subnet mapping table that

are not in the stored subnet mapping table of the first AAP and then determining

whether the AP ("wireless interface transfer destination") IP address is stored in its

subnet mapping table and then confirming that the entry is still active and reachable).

The applicant claims "and an estimating means for estimating that a terminal

having said extracted address exists as a subordinate of the access point retaining said

packet transfer information" (Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 &

55-61 & Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi discloses the AAP

maintaining a subnet mapping table of subordinate APs as well as disclosing

determining that the AP identified in that entry is still alive and is reachable before

adding the entry to the first AAPs subnet mapping table, therefore estimating that a

terminal (AP identified) having said extracted address exists as a subordinate of the

access point retaining said packet transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port

bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound

to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 &

Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table

storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify

the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping

table containing information such as the destination address and the corresponding port

of the wireless interface for the purpose of improving the system by providing a more

complete and in depth information on how to route the packets and what port to use,

thereby ensuring the packets are routed and lowering the processing time of the system

by not having to discover the status of the destination terminal but just using the subnet

mapping table to identify the corresponding information.

Regarding claim 2, Siddiqi discloses:

The applicant claims "A monitor apparatus of a wireless network, comprising: a

means connected to an access point of the wireless network via a network, said means

configured to receive packet transfer information retained in said access point and

extract an address of which a transfer destination is a wireless interface from said

packet transfer information" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 &

Column 6, Lines 20-25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-

45 of Siddiqi, wherein Siddiqi discloses a second AAP (authoritative access point)

sending AP (access point) information such as a subnet mapping table to a first AAP

and wherein the first AAP attempts to add entries from the received subnet mapping

table ("packet transfer information") to its own subnet mapping table by first comparing

and determining if there are additional items in the received subnet mapping table that

are not in the stored subnet mapping table of the first AAP and then determining

whether the AP ("wireless interface transfer destination") IP address is stored in its

subnet mapping table and then confirming that the entry is still active and reachable).

The applicant claims "and a determining means for investigating an operation

situation of a terminal having said extracted address to determine that said terminal

having said extracted address has a connection with the access point retaining said

packet transfer information in a case where said terminal having said address is in

operation" (Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 of Siddiqi &

Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a

subnet mapping table of subordinate APs as well as disclosing determining that the AP

identified in that entry is still alive and is reachable before adding the entry to the first

AAPs subnet mapping table, therefore determining an operation situation of a terminal

(AP identified), whether ALIVE or not or can be reached or not, having said extracted

address has a connection with the access point retaining said packet transfer

information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 & Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping table containing information such as the destination address and the corresponding port of the wireless interface for the purpose of improving the system by providing a more complete and in depth information on how to route the packets and what port to use, thereby ensuring the packets are routed and lowering the processing time of the system by not having to discover the status of the destination terminal but just using the subnet mapping table to identify the corresponding information.

Regarding claim 3, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor apparatus of a wireless network according to claim 2, further comprising: a managed terminal list having an address of a terminal, which is a target of management, registered" (Fig. 4, & Column 8, Lines 24-33 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a subnet mapping table storing a plurality of entries each storing AP information).

The applicant claims "and a determining means for comparing said extracted address with an address described in said managed terminal list" (Fig. 6 & Column 9, Lines 43-46 of Siddiqi, wherein Siddiqi discloses the AAP receiver checking and determining if the AP IP address is stored in its own subnet mapping table).

The applicant claims "and for, in a case where said extracted address is not included in said managed terminal list, determining that an access to the access point retaining said packet transfer information has been made by a terminal that is not a target of management" (Fig. 6 & Column 9, Lines 43-46 & Lines 53-58 of Siddiqi, wherein Siddiqi discloses the AAP receiver checking if the AP IP address is in its subnet mapping table and if it is not included within the subnet mapping table of the AAP receiver sending an ALIVE packet to determine if the AP is active).

Regarding claim 4, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor apparatus of a wireless network according to claim 2, further comprising: a means for drawing a result on a relation between an access point and terminals, which are estimated to be existent as subordinates of said access point, or are determined to be in connection with said access point" (Fig. 6 & Column 9, Lines 53-58 of Siddiqi, wherein Siddiqi discloses the AAP receiver sending an ALIVE packet to the AP IP address which was identified under the sending AAP subnet mapping table to determine if the AP is active, if the AP is active it will send an ALIVE ACK back to the receiver AAP).

The applicant claims "for all the access points under management thereof to display a relation between each access point and each terminal that is estimated to be

existent as a subordinate of each access point, or each terminal that is determined to be

in connection with each access point" (Fig. 4 & Column 8, Lines 24-43 of Siddiqi,

wherein Siddiqi discloses the subnet mapping table being maintained by the AAP to

contain AP information such as subnet mask and IP address).

Regarding claim 5, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor apparatus of a wireless network according to

claim 2, characterized in, in a case where the address of the identical terminal has been

described in said packet transfer information retained by plural access points" (Column

10, Lines 35-40 & Column 8, Lines 48-50 of Siddiqi, wherein Siddiqi discloses the

synchronization operation performed by the AAPs is done so that every AP in the entire

network will have the same copy of the table and wherein Siddiqi discloses the AP

being initially configured with one or more AAP).

The applicant claims "a means for, from among said packet transfer information,

selecting the packet transfer information retained by the access point belonging to an

identical subnet to that of said terminal" (Column 7, Lines 17-18 & Column 9, Lines 37-

45 of Siddiqi, wherein Siddiqi discloses that the AAP and all other APs maintain

identical subnet mapping tables and wherein Siddiqi discloses the receiver AAP

attempting to add entries from the received subnet mapping table to its own subnet

mapping table and determines if the AP IP address is already stored in its own mapping

table).

The applicant claims "a means for, in a case where said selected packet transfer

information retained by the access point belongs to the identical subnet to that of said

terminal, and yet the number thereof is only one" (Column 8, Lines 48-50 of Siddiqi,

wherein Siddiqi discloses the AP being initially configured with one or more AAP).

The applicant claims "estimating that said terminal exists as an subordinate of

said one access point" (Fig. 4 & Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi

discloses the AAP maintaining a subnet mapping table of subordinate APs).

The applicant claims "for, in a case where said access point belongs to the

identical subnet to that of said terminal, and yet the number thereof is plural" (Column 8,

Lines 48-50 of Siddiqi, wherein Siddiqi discloses the AP being initially configured with

one or more AAP).

The applicant claims "estimating that said terminal exists as an subordinate of

one of said plurality of said access points" (Fig. 4 & Column 8, Lines 25-34 of Siddiqi,

wherein Siddiqi discloses the AAP maintaining a subnet mapping table of subordinate

APs).

Regarding claim 7, Siddiqi discloses:

The applicant claims "A monitor system of a wireless network, said monitor

system comprising: at least one access point of a wireless network; at least one

terminal of the wireless network" (Column 7, Lines 17-18 of Siddiqi, wherein Siddiqi

discloses an AAP (access point) and an AP (terminal)).

The applicant claims "and a monitor apparatus connected to said access point

via a network, wherein in said monitor apparatus comprises: a means for receiving

packet transfer information retained in said access point and extracting an address of

which a transfer destination is a wireless interface from said packet transfer information"

(Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein Siddiqi discloses a second AAP (authoritative access point) sending AP (access point) information such as a subnet mapping table to a first AAP and wherein the first AAP attempts to add entries from the received subnet mapping table ("packet transfer information") to its own subnet mapping table by first comparing and determining if there are additional items in the received subnet mapping table that are not in the stored subnet mapping table of the first AAP and then determining whether the AP ("wireless interface transfer destination") IP address is stored in its subnet mapping table and then confirming that the entry is still active and reachable).

The applicant claims "and an estimating means for estimating that said terminal having said extracted address exists as a subordinate of the access point retaining said packet transfer information" (Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 & Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a subnet mapping table of subordinate APs as well as disclosing determining that the AP identified in that entry is still alive and is reachable before adding the entry to the first AAPs subnet mapping table, therefore estimating that a terminal (AP identified) having said extracted address exists as a subordinate of the access point retaining said packet transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 & Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping table containing information such as the destination address and the corresponding port of the wireless interface for the purpose of improving the system by providing a more complete and in depth information on how to route the packets and what port to use, thereby ensuring the packets are routed and lowering the processing time of the system by not having to discover the status of the destination terminal but just using the subnet mapping table to identify the corresponding information.

Regarding claim 8, Siddiqi discloses:

The applicant claims "A monitor system of a wireless network, said monitor system comprising: at least one access point of the wireless network; at least one terminal of the wireless network" (Column 7, Lines 17-18 of Siddiqi, wherein Siddiqi discloses an AAP (access point) and an AP (terminal)).

The applicant claims "and a monitor apparatus connected to said access point via a network, wherein said monitor apparatus comprises: a means for receiving packet transfer information retained in said access point and extracting an address of which a transfer destination is a wireless interface from said packet transfer information" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-25 & Column 7,

Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein Siddiqi

discloses a second AAP (authoritative access point) sending AP (access point)

information such as a subnet mapping table to a first AAP and wherein the first AAP

attempts to add entries from the received subnet mapping table ("packet transfer

information") to its own subnet mapping table by first comparing and determining if there

are additional items in the received subnet mapping table that are not in the stored

subnet mapping table of the first AAP and then determining whether the AP ("wireless

interface transfer destination") IP address is stored in its subnet mapping table and then

confirming that the entry is still active and reachable).

The applicant claims "and a determining means for investigating an operation

situation of said terminal having said extracted address to determine that said terminal

having said extracted address has a connection with the access point retaining said

packet transfer information in a case where said terminal having said address is in

operation" (Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 of Siddiqi &

Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a

subnet mapping table of subordinate APs as well as disclosing determining that the AP

identified in that entry is still alive and is reachable before adding the entry to the first

AAPs subnet mapping table, therefore determining an operation situation of a terminal

(AP identified), whether ALIVE or not or can be reached or not, having said extracted

address has a connection with the access point retaining said packet transfer

information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 & Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping table containing information such as the destination address and the corresponding port of the wireless interface for the purpose of improving the system by providing a more complete and in depth information on how to route the packets and what port to use, thereby ensuring the packets are routed and lowering the processing time of the system by not having to discover the status of the destination terminal but just using the subnet mapping table to identify the corresponding information.

Regarding claim 9, Siddiqi in view of Fukutomi discloses "The monitor system of a wireless network according to claim 8." The examiner rejects claim 9 with the same arguments provided above (see claim 3).

Regarding claim 10, Siddiqi in view of Fukutomi discloses "The monitor system of a wireless network according to claim 8." The examiner rejects claim 10 with the same arguments provided above (see claim 4).

Regarding claim 11, Siddiqi in view of Fukutomi discloses "The monitor system of a wireless network according to claim 8." The examiner rejects claim 11 with the same arguments provided above (see claim 5).

Regarding claim 13, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor system of a wireless network according to claim 8, wherein: said terminal includes a means for transmitting a broadcast packet; and said access point includes a means for updating the packet transfer information that the access point retains based upon said broadcast packet" (Fig. 5 & Column 8, Lines 44-60 of Siddiqi, wherein Siddiqi discloses the AP sending an ADD or REMOVE message to the AAP and wherein when the AP shuts down it sends a REMOVE message requesting that its IP address be removed from the subnet mapping table of the AAP).

Regarding claim 14, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor system of a wireless network according to claim 8, wherein said access point further comprises: a means for notifying to the other access point information as to which access point to which the terminal belongs" (Fig. 6 & Column 9, Lines 16-24 of Siddiqi, wherein Siddiqi discloses a second AAP sending AP information such as its subnet mapping table to a first AAP).

The applicant claims "and a means for updating the packet transfer information that the access point retains based upon said information as to which access point to which said terminal belongs" (Fig. 6 & Column 34-50, wherein Siddiqi discloses the AAP

receiver updating its own subnet mapping table by adding the entries from the received

subnet mapping table that are not already in its own subnet mapping table).

Regarding claim 15, Siddiqi discloses:

The applicant claims " a control program embodied on a non-transitory memory"

(Column 10, Lines 53-58 of Siddiqi, wherein Siddiqi discloses that a software

implementation of the techniques of the invention is stored in a general-purpose

programmable machine).

The applicant claims " that causes a device to perform operations comprising:

receiving packet transfer information retained in said access point and extracting an

address of which a transfer destination is a wireless interface from said packet transfer

information" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-

25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein

Siddiqi discloses a second AAP (authoritative access point) sending AP (access point)

information such as a subnet mapping table to a first AAP and wherein the first AAP

attempts to add entries from the received subnet mapping table ("packet transfer

information") to its own subnet mapping table by first comparing and determining if there

are additional items in the received subnet mapping table that are not in the stored

subnet mapping table of the first AAP and then determining whether the AP ("wireless

interface transfer destination") IP address is stored in its subnet mapping table and then

confirming that the entry is still active and reachable).

The applicant claims "and computer code for estimating that a terminal having

said extracted address exists as a subordinate of the access point retaining said packet

transfer information" (Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 &

Column 8, Lines 25-34 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a

subnet mapping table of subordinate APs as well as disclosing determining that the AP

identified in that entry is still alive and is reachable before adding the entry to the first

AAPs subnet mapping table, therefore estimating that a terminal (AP identified) having

said extracted address exists as a subordinate of the access point retaining said packet

transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port

bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound

to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 &

Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table

storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify

the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping

table containing information such as the destination address and the corresponding port

of the wireless interface for the purpose of improving the system by providing a more

complete and in depth information on how to route the packets and what port to use,

thereby ensuring the packets are routed and lowering the processing time of the system

by not having to discover the information/status of the destination terminal but just using

the subnet mapping table to identify the corresponding information/status.

Regarding claim 16, Siddiqi discloses:

The applicant claims " a control program embodied on a non-transitory memory"

(Column 10, Lines 53-58 of Siddiqi, wherein Siddiqi discloses that a software

implementation of the techniques of the invention is stored in a general-purpose

programmable machine).

The applicant claims " that causes a device to perform operations comprising:

receiving packet transfer information retained in said access point and extracting an

address of which a transfer destination is a wireless interface from said packet transfer

information" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-

25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein

Siddiqi discloses a second AAP (authoritative access point) sending AP (access point)

information such as a subnet mapping table to a first AAP and wherein the first AAP

attempts to add entries from the received subnet mapping table ("packet transfer

information") to its own subnet mapping table by first comparing and determining if there

are additional items in the received subnet mapping table that are not in the stored

subnet mapping table of the first AAP and then determining whether the AP ("wireless

interface transfer destination") IP address is stored in its subnet mapping table and then

confirming that the entry is still active and reachable).

The applicant claims "and computer code for investigating an operation situation

of a terminal having said extracted address to determine that said terminal having said

extracted address has a connection with the access point retaining said packet transfer

information in a case where said terminal having said address is in operation" (Fig. 4 &

Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 & Column 8, Lines 25-34 of

Siddiqi, wherein Siddiqi discloses the AAP maintaining a subnet mapping table of

subordinate APs as well as disclosing determining that the AP identified in that entry is

still alive and is reachable before adding the entry to the first AAPs subnet mapping

table, therefore determining an operation situation of a terminal (AP identified), whether

ALIVE or not or can be reached or not, having said extracted address has a connection

with the access point retaining said packet transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port

bound to a wireless interface from said packet transfer information."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound

to a wireless interface from said packet transfer information" (Fig. 2 & Fig. 4 &

Paragraph [0032]-[0034] of Fukutomi, wherein Fukutomi discloses the mapping table

storing information such as IP addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify

the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping

table containing information such as the destination address and the corresponding port

of the wireless interface for the purpose of improving the system by providing a more

complete and in depth information on how to route the packets and what port to use,

thereby ensuring the packets are routed and lowering the processing time of the system

by not having to discover the status of the destination terminal but just using the subnet

mapping table to identify the corresponding information.

Regarding claim 17, Siddiqi in view of Fukutomi discloses "The control program according to claim 16." The apparatus/system claims disclosed above performs the functionalities that correspond to the computer program product claim, therefore the examiner rejects claim 17 with the same arguments provided above (see claim 3).

Regarding claim 18, Siddiqi in view of Fukutomi discloses "The control program according to claim 16." The apparatus/system claims disclosed above performs the functionalities that correspond to the computer program product claim, therefore the examiner rejects claim 18 with the same arguments provided above (see claim 4).

Regarding claim 19, Siddiqi in view of Fukutomi discloses "The control program according to claim 16." The apparatus/system claims disclosed above performs the functionalities that correspond to the computer program product claim, therefore the examiner rejects claim 19 with the same arguments provided above (see claim 5).

Regarding claim 21, Siddiqi discloses:

The applicant claims "A monitor method of a wireless network for managing a terminal, comprising: extracting an address of which a transfer destination is a wireless interface from packet transfer information that an access point of the wireless network retains" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein Siddiqi discloses a second AAP (authoritative access point) sending AP (access point) information such as a subnet mapping table to a first AAP and wherein the first AAP attempts to add entries from the received subnet mapping table ("packet transfer information") to its own subnet mapping table by first comparing and determining if there

are additional items in the received subnet mapping table that are not in the stored

subnet mapping table of the first AAP and then determining whether the AP ("wireless

interface transfer destination") IP address is stored in its subnet mapping table and then

confirming that the entry is still active and reachable).

The applicant claims "and estimating that a terminal having said extracted address

exists as a subordinate of the access point retaining said packet transfer information"

(Fig. 4 & Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 & Column 8, Lines 25-

34 of Siddiqi, wherein Siddiqi discloses the AAP maintaining a subnet mapping table of

subordinate APs as well as disclosing determining that the AP identified in that entry is

still alive and is reachable before adding the entry to the first AAPs subnet mapping

table, therefore estimating that a terminal (AP identified) having said extracted address

exists as a subordinate of the access point retaining said packet transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port

bound to a wireless interface from packet transfer information that an access point of

the wireless network retains."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound

to a wireless interface from packet transfer information that an access point of the

wireless network retains" (Fig. 2 & Fig. 4 & Paragraph [0032]-[0034] of Fukutomi,

wherein Fukutomi discloses the mapping table storing information such as IP

addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping table containing information such as the destination address and the corresponding port of the wireless interface for the purpose of improving the system by providing a more complete and in depth information on how to route the packets and what port to use, thereby ensuring the packets are routed and lowering the processing time of the system by not having to discover the status of the destination terminal but just using the subnet mapping table to identify the corresponding information.

Regarding claim 22, Siddiqi discloses:

The applicant claims "A monitor method of a wireless network for managing a terminal, comprising: extracting an address of which a transfer destination is a wireless interface from packet transfer information that an access point of the wireless network retains" (Fig. 6 & Column 4, Lines 65 – Column 5, Lines 1-6 & Column 6, Lines 20-25 & Column 7, Lines 55-61 & Column 9, Lines 15-24 & Lines 37-45 of Siddiqi, wherein Siddiqi discloses a second AAP (authoritative access point) sending AP (access point) information such as a subnet mapping table to a first AAP and wherein the first AAP attempts to add entries from the received subnet mapping table ("packet transfer information") to its own subnet mapping table by first comparing and determining if there are additional items in the received subnet mapping table that are not in the stored subnet mapping table of the first AAP and then determining whether the AP ("wireless interface transfer destination") IP address is stored in its subnet mapping table and then confirming that the entry is still active and reachable).

The applicant claims "and investigating an operation situation of a terminal

having said extracted address to determine if said terminal having said extracted

address has a connection with the access point retaining said packet transfer

information in a case where said terminal having said address is in operation" (Fig. 4 &

Column 5, Lines 1-7 & Column 7, Lines 40-41 & 55-61 & Column 8, Lines 25-34 of

Siddiqi, wherein Siddiqi discloses the AAP maintaining a subnet mapping table of

subordinate APs as well as disclosing determining that the AP identified in that entry is

still alive and is reachable before adding the entry to the first AAPs subnet mapping

table, therefore determining an operation situation of a terminal (AP identified), whether

ALIVE or not or can be reached or not, having said extracted address has a connection

with the access point retaining said packet transfer information).

Siddiqi fails to explicitly recite "an address of which a transfer destination is a port

bound to a wireless interface from packet transfer information that an access point of

the wireless network retains."

In a related field of endeavor, Fukutomi discloses:

The applicant claims "an address of which a transfer destination is a port bound

to a wireless interface from packet transfer information that an access point of the

wireless network retains" (Fig. 2 & Fig. 4 & Paragraph [0032]-[0034] of Fukutomi,

wherein Fukutomi discloses the mapping table storing information such as IP

addresses, destination address and the output ports).

Therefore, it would have been obvious to one of ordinary skill in the art to modify

the invention of Siddiqi to incorporate the teachings of Fukutomi of having a mapping

table containing information such as the destination address and the corresponding port

of the wireless interface for the purpose of improving the system by providing a more

complete and in depth information on how to route the packets and what port to use,

thereby ensuring the packets are routed and lowering the processing time of the system

by not having to discover the status of the destination terminal but just using the subnet

mapping table to identify the corresponding information.

Regarding claim 23, Siddiqi in view of Fukutomi discloses "The monitor method

of a wireless network according to claim 22." The examiner rejects claim 23 with the

same arguments provided above (see claim 3).

Regarding claim 24, Siddiqi in view of Fukutomi discloses "The monitor method

of a wireless network according to claim 22." The examiner rejects claim 24 with the

same arguments provided above (see claim 4).

Regarding claim 25, Siddiqi in view of Fukutomi discloses "The monitor method

of a wireless network according to claim 22." The examiner rejects claim 25 with the

same arguments provided above (see claim 5).


8.      Claims 6, 12, 20 and 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Siddiqi et al. (US Patent 7362742 herein after referenced as Siddiqi)

in view of Fukutomi (US Patent Publication 2003/0012202 herein after referenced as

Fukutomi) and further in view of Kime et al. (US Patent Publication 2005/0060576

herein after referenced as Kime).

Regarding claim 6, Siddiqi in view of Fukutomi discloses:

The applicant claims "The monitor apparatus of a wireless network according to claim 2, characterized in, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points" (Column 10, Lines 35-40 & Column 8, Lines 48-50 of Siddiqi, wherein Siddiqi discloses the synchronization operation performed by the AAPs is done so that every AP in the entire network will have the same copy of the table and wherein Siddiqi discloses the AP being initially configured with one or more AAP).

The applicant claims "including: a means for, from said terminal, acquiring identification information of the wireless network to which said terminal belongs" (Column 7, Lines 48-52 & Lines 63-37 of Siddiqi, wherein the AP sends AP information to the AAP when it first powers up and then the AAP sends the AP information associated with other active APs from the subnet mapping table to the newly active AP).

The applicant claims "and a means for determining that said terminal has a connection with its access point" (Column 9, Lines 53-55 of Siddiqi, wherein Siddiqi discloses the AAP sending an ALIVE packet to determine if the AP is active).

Siddiqi fails to explicitly recite "a means for comparing identification information of said plural access points with the identification information acquired from said terminal."

In a related field of endeavor, Kime discloses:

The applicant claims "a means for comparing identification information with the identification information acquired from said terminal" (Fig. 3 & Paragraph [0028] wherein Kime discloses comparing the client information such as IP or MAC addresses

with information previously stored of authorized clients to determine if an unauthorized

client is accessing network resources).

Therefore it would have been obvious for one of ordinary skill in the art to modify

the invention of Siddiqi in view of Fukutomi to incorporate an authentication process as

taught by Kime, the reason for the combination being to increase security and to

determine and prevent fraudulent and unauthorized access points from accessing the

network (Paragraph [0029] of Kime).

Regarding claim 12, Siddiqi in view of Fukutomi discloses "The monitor system of

a wireless network according to claim 8." The examiner rejects claim 12 with the same

arguments provided above (see claim 6).

Regarding claim 20, Siddiqi in view of Fukutomi discloses "The control program

according to claim 16." The examiner rejects claim 20 with the same arguments

provided above (see claim 6).

Regarding claim 26, Siddiqi in view of Fukutomi discloses "The monitor method

of a wireless network according to claim 22." The examiner rejects claim 26 with the

same arguments provided above (see claim 6).

### *Conclusion*

9.      **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.


10.    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Mapa whose telephone number is (571)270-

5540.  The examiner can normally be reached on MONDAY TO THURSDAY 8:00AM -

5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dwayne Bost can be reached on (571)272-7023.  The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


                                                  /Dwayne D. Bost/
                                                  Supervisory Patent Examiner,
                                                  Art Unit 2617

/Michael  Mapa/
Examiner, Art Unit 2617